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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,416	07/19/2001	Erik M. Geidl	2840	7292

7590 06/28/2005

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EXAMINER	
MARIAM, DANIEL G	

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/909,416	GEIDL ET AL.	
	Examiner	Art Unit	
	DANIEL G. MARIAM	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *12-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,29-36 and 38-43* is/are rejected.

7)☒ Claim(s) *37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-11 and 29-43) in the reply filed on April 5, 2005 is acknowledged. The traversal is on the ground(s) that the claims are not directed to the recognition of handwritten information. This is not found persuasive because claim 1, in part, recites inputting a handwritten data, converting the handwritten data into electronic ink information, and software that interprets the electronic ink data. Although the claim does not mention handwriting recognition per se, without some recognition of the converted electronic ink data, the software would not be able to interpret the ink data information. Claim 29 is directed to data structure, however, the function recited therein is related to claim 1, and the only appropriate place to classify this data structure invention is in class 382 sub class 187. Additionally, it is unclear why applicant says nothing about the restriction requirement of Group II (claims 12-28) in light of Group I. The Examiner considers it an undue burden to examine two groups of the invention within a single application, especially when the time allotted for examining the application remains unchanged. Time is at a premium and the best insurance of a quality examination is a limit of one invention per application. Every effort will be made to see that the same examiner works on any divisional application if filed. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-11 and 29-32, 34-36 and 38-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Capps, et al. (5,596,350).

With regard to claim 1, an input device configured to receive handwriting input and convert the handwriting input to electronic ink information (See item 20, in Figure 1); a mechanism configured to provide an object to maintain electronic ink data that corresponds to the electronic ink information, the object having at least one interface (See for example, items 432 and 434, in Figure 3); executable code associated with the object, i.e., ink object, and comprising functionality arranged to interpret the electronic ink data and output a representation of the electronic ink data therefrom, and a software module, i.e., logical software comprising data and processes, that invokes the functionality of the object via the at least one interface to cause the object to interpret the electronic ink data to output the representation (See for example, col. 7, line 28 – col. 8, line 23; and col. 5, lines 37-43; and Fig. 2).

With regard to claim 2, the system of claim 1 wherein the input device comprises a tablet (See item 20, in Fig. 1).

With regard to claim 3, the system of claim 1 further comprising a display device, wherein the object outputs the representation of the electronic ink data as a visual image to the display device (See item 20, in Fig. 1; and Figs. 2 and 3).

With regard to claim 4, the system of claim 1 wherein the software module comprises an application program, and wherein the functionality is further arranged to enable the application program to control the output of the representation (See for example, col. 5, lines 36-42).

With regard to claim 5, the system of claim 4 wherein the output comprises a displayed image, and wherein the application program controls the output by requesting a particular representation, i.e., text paragraph or graphic paragraph, of the displayed image (See for example, item 456, in Fig. 4).

With regard to claim 6, the system of claim 1 wherein the output comprises a displayed image, and wherein the object includes additional data, i.e., size, and functionality for adjusting, i.e., reformatting, the image appearance to correspond to information displayed relative to the image (See for example, col. 8, lines 48-67; and Fig. 18).

With regard to claim 7, the system of claim 1 further comprising a handwriting recognizer that converts electronic ink information to other information, i.e., words, and wherein the object maintains at least some results from the handwriting recognizer (which reads on col. 9, lines 4-42; and col. 7, lines 28-47).

With regard to claim 8, the system of claim 1 wherein the object is further associated with functionality comprising, a method directed to performing at least one of the following operations: editing, formatting and searching (See for example, item 454, in Fig. 4; and Fig. 10).

With regard to claim 9, the system of claim 1 wherein the object is further associated with functionality comprising, a method directed to performing at least one of the following operations: combining multiple objects into a single object, and separating a single object into multiple objects (See for example, Fig. 15).

With regard to claim 10, the system of claim 1 further comprising, a handwriting recognizer that converts electronic ink information to words, and wherein the object represents a single word (which reads on col. 9, lines 4-42; and col. 7, lines 28-47).

With regard to claim 11, the system of claim 1 wherein the object includes additional data comprising at least one of the following types of data: normalization data, previous object identification data, and next object identification data (See for example, Figs. 7 and 10).

With regard to claim 29, a computer-readable medium having stored thereon a data structure, comprising, a data field including electronic ink data (See for example, items 432 and 434, in Figure 3); at least one interface for invoking functionality associated with the data structure, including functionality for rendering a representation of the electronic ink data (See for example, the bounding box surrounding the electronic data in Fig. 3); and the functionality invoked via the interface by executable code hosting a document, i.e., note, containing the data structure, to render a representation of the electronic ink data relative to other information contained in the document (See for example, Figs. 2 and 3; and col. 7, line 28 – col. 8, line 23).

With regard to claim 30, the data structure of claim 29 further comprising, other functionality for matching, i.e., close, the appearance of the representation to the other information contained in the document (See for example, col. 14, lines 18-20; and Fig. 14).

With regard to claim 31, the data structure of claim 29 wherein the other information contained in the document comprises text data (See Figs. 2 & 3) and further comprising, at least one other data field, i.e. paragraph, in the data structure for maintaining adjustment information for adjusting the representation to match the text data, and other functionality associated with the

data structure for adjusting the representation based on the adjustment information to match the text data (See for example, Fig. 7).

With regard to claim 32, the data structure of claim 31 wherein the at least one other field contains baseline data, and wherein the functionality adjusts the representation to match the text data by evaluating the baseline information (See for example, col. 8, lines 18-32; and col. 16, lines 49-65).

With regard to claim 34, the data structure of claim 29 further comprising, at least one other data field that maintains identifier information, i.e., word paragraph, of another object (See for example, item 466, in Fig. 5; and Figs. 2-3).

With regard to claim 35, the data structure of claim 29 further comprising, at least one other data field that maintains information related to normalization of the electronic ink data (See for example, item 466, in Fig. 5; and Figs. 2-3).

With regard to claim 36, the data structure of claim 29 further comprising, at least one other data field that maintains information related to formatting the electronic ink data, and further comprising other functionality associated with the data structure to enable the executable code to modify the information related to formatting the electronic ink data (See for example, col. 7, line 48-col. 8, line 6).

With regard to claim 38, the data structure of claim 29 further comprising, at least one other data field that maintains size information related to a displayed size of the electronic ink data, and further comprising other functionality associated with the data structure to enable the executable code to modify the size information (See for example, Figs. 7, 12 & 19).

With regard to claim 39, the data structure of claim 29 further comprising, at least one other data field that maintains recognition information related to recognition of the electronic ink data by a recognition engine (which reads on col. 9, lines 4-42).

With regard to claim 40, the data structure of claim 39 wherein the at least one other field contains recognition state (given the broadest reasonable interpretation, it reads on the separation of the written word as text and graphic paragraph, and performing identification/recognition on the data).

With regard to claim 41, the data structure of claim 39 wherein the at least one other field contains a result from the recognition engine, i.e., a result based on the identification that whether the paragraph shown on the note pad of Fig. 3 is text or graphic).

With regard to claim 42, the data structure of claim 41 wherein the result from the recognition engine includes at least one candidate corresponding to the electronic ink data (See for example, item 432, in Fig. 3).

With regard to claim 43, the data structure of claim 42 further comprising other functionality associated with the data structure to enable the executable code to obtain information about the at least one candidate (See for example, col. 7, lines 48-62).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Capps, et al. (5,596,350).

With regard to claim 33, Capps, et al. discloses all of the claimed subject matter as already discussed above in paragraph 3, and the arguments are not repeated herein, but are incorporated by reference. While Capps, et al uses the top and the base lines data as a writing guide, Capps, et al does not expressly call for wherein the at least one other field contains midline data, and wherein the functionality adjusts the representation to match the text data by evaluating the midline information. Although Capps, et al. does not expressly provide a field containing midline data, it would have been an obvious matter of design choice to modify the top and base line data information (shown in Fig. 3) by using a midline data to adjust or format the representation of the data, since no new or unexpected results are seen to be attained by providing a midline data, and it appears that the base line and top line would equally adjust or format the data representation.

Allowable Subject Matter

6. Claim 37 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art of Capps, et l does not teach or fairly suggest at least one other data field that maintains color information related to a color of the electronic ink data, and further comprising other functionality associated with the data structure to enable the

executable code to modify the color information. It is for this reason ad in combination with all of the base claim that claim 37 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 5465325, 5467407, 5500937, 5566248, and 6741749.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH M. MEHTA can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL MIRIAM
PRIMARY EXAMINER

June 17, 2005